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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/578,977	05/10/2006	Xiaohui Jin	CN03 0038 US1	4522

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PHILIPS ELECTRONICS NORTH AMERICA CORPORATION  
INTELLECTUAL PROPERTY & STANDARDS  
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SAN JOSE, CA 95131

EXAMINER
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BATISTA, MARCOS

ART UNIT	PAPER NUMBER
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4134

MAIL DATE	DELIVERY MODE
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04/30/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/578,977	<b>Applicant(s)</b> JIN ET AL.	
	<b>Examiner</b> MARCOS BATISTA	<b>Art Unit</b> 4134	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 May 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05/10/2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>05/10/2006</u> .  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Claim Objections*

1. Claims 2-8 are objected to because of the following informalities:

Claim 2 recites the limitation "threshold" in line 2. There is insufficient antecedent basis for this limitation in the claim. "the VAD threshold" should be changed to -- a VAD threshold -- in claim 2, line 2.

Appropriate correction is required.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Hamalainen et al. (US 6477176 B1).

Consider claim 1, Hamalainen a method for a mobile terminal (**fig. 1**) to transmit non-speech data in voice channel, comprising: (a) generating a non-speech data frame Tx (transmitting) indication according to the preset non-speech data frame Tx indication generating mode (**see fig. 5, col. 5 lines 1-3 - the preset value is the vad/off**

**condition**); (b) generating a VAD (voice activity detection) flag about the next frame according to the non-speech data frame Tx indication (**see fig. 5, col. 4 lines 60-63**); (c) transmitting the non-speech data frame during the next frame if the VAD flag indicates that the next frame is non-speech period.

Consider claim 10, this is an apparatus claim corresponding to method claim 1. Therefore, it has have been analyzed and rejected based upon the method claim 1 above.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2-8 and 11-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hamalainen et al. (US 6477176 B1), hereafter "Hamalainen," in view of Mattila et al. (US 6810273 B1), hereafter "Mattila."

Consider claim 2, Hamalainen discloses the invention of claim 1 above. Hamalainen also teaches generating the VAD flag of the next frame according to the adjusted VAD threshold (see fig. 5, col. 4 lines 60-63).

Hamalainen discloses the invention of claim 1 above, but does not particular refer to adjusting the VAD threshold currently used by the mobile terminal according to said non-speech data frame Tx indication.

Mattila, in analogous art, teaches adjusting the VAD threshold currently used by the mobile terminal according to said non-speech data frame Tx indication (see col. 3 lines 50-53 and col. 17 lines 52-58).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the invention of Hamalainen and have it include adjusting the VAD threshold currently used by the mobile terminal according to said non-speech data frame Tx indication, as taught by Mattila. The motivation would have been in order to provide reliable non-speech detection and to avoid identifying noise with speech (see col. 3 lines 50-53).

Consider claim 3, Hamalainen as modified by Mattila teaches claim 2. Mattila also teaches backing up the current VAD threshold (see col. 17 lines 46-51); setting a value higher than the current VAD threshold as the adjusted VAD threshold (see col. 17 lines 58-61).; restoring the adjusted VAD threshold to the backup VAD threshold after executing said step (c) (see col. 25 lines 35-38).

It would have been obvious to have modified Hamalainen's invention with the teaching of Mattila. The motivation would have been in order to provide reliable non-speech detection and to avoid identifying noise with speech (see col. 3 lines 50-53).

Consider claim 4, Hamalainen as modified by Mattila teaches claim 3. Hamalainen also teaches wherein said non-speech data frame Tx indication generating mode can be set to generate the Tx indication to transmit said non-speech data frame instantly when there exists said non-speech data frame to be transmitted (see col. 3 lines 56-63).

Consider claim 5, Hamalainen as modified by Mattila teaches claim 3. Hamalainen also teaches wherein said non-speech data frame Tx indication generating mode can be set to generate the Tx indication to transmit said non-speech data frame instantly when the Tx deadline of the non-speech data frame to be transmitted expires (see col. 2 lines 41-44 and col. 17 lines 56-63).

Consider claim 6, Hamalainen as modified by Mattila teaches claim 2. Hamalainen also teaches selecting parameters corresponding to different priority according to said non-speech data frame Tx indication (see col. 6 lines 33-38); adjusting the current VAD threshold to the values corresponding to different priority, by using the selected parameters (see col. 6 lines 33-38).

Consider claim 7, Hamalainen as modified by Mattila teaches claim 6. Hamalainen also teaches wherein said non-speech data frame Tx indication generating mode can be set to correspond to the number of said non-speech data frames to be transmitted with said priority, and to generate said non-speech data frame Tx indication according to the number of said non-speech data frames (see col. 6 lines 30-38).

Consider claim 8, Hamalainen as modified by Mattila teaches claim 6.

Hamalainen also teaches wherein said non-speech data frame Tx indication generating mode can be set to correspond to the urgency of said non-speech data frames to be transmitted with said priority, and to generate said non-speech data frame Tx indication according to the urgency of said non-speech data frame (see col. 6 lines 30-38).

Consider claims 11-17, these are apparatus claims corresponding to method claims 2-8. Therefore, they have been analyzed and rejected based upon the method claims 2-8 respectively.

6. Claims 9 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hamalainen et al. (US 6477176 B1), hereafter "Hamalainen," in view of Vensko et al. (US 4624008 A), hereafter "Vensko."

Consider claim 9, Hamalainen discloses the invention of claim 1 above, but does not particular refer to counting the number of non-speech data frames to be transmitted; judging whether the counted number exceeds a predefined criterion; pausing transmission of said non-speech data frames if the counted number exceeds the predefined criterion.

Vensko, teaches counting the number of non-speech data frames to be transmitted (see col. 6 lines 41-44); judging whether the counted number exceeds a predefined criterion (see col. 6 lines 44-47); pausing transmission of said non-speech data frames if the counted number exceeds the predefined criterion (see col. 6 lines 58-60).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the invention of Hamalainen and have it include counting the number of non-speech data frames to be transmitted; judging whether the counted number exceeds a predefined criterion; pausing transmission of said non-speech data frames if the counted number exceeds the predefined criterion, as taught by Vensko. The motivation would have been in order to be able to effectively distinguish speech and non-speech signal (see col. 6 lines 50-55).

Consider claim 18, this is an apparatus claim corresponding to method claim 9. Therefore, it has have been analyzed and rejected based upon the method claim 9 above.



### ***Conclusion***

7. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Marcos Batista, whose telephone number is (571) 270-5209. The Examiner can normally be reached on Monday-Thursday from 8:00am to 5:00pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Lun-Yi Lao can be reached at (571) 272-7671. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 703-305-3028.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

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*Marcos Batista*  
/M. B./  
04/22/2008

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Supervisory Patent Examiner, Art Unit 4134